

wherein said source of mechanical motion is configured to provide low-frequency vibrational motion to the vibratory motion catheter, said low-frequency vibrational motion including rotational motion about the longitudinal axis and at least one of translational motion and oscillatory motion.

40. (Twice amended) A device of Claim 38 wherein said source of mechanical motion is configured to provide said low-frequency vibrational motion to said elongate vibratory motion catheter such that said vibrational motion is greater near the distal end of said elongate vibratory motion catheter than at the proximal end of said elongate vibratory motion catheter.

42. (Twice amended) A method of dissolution of obstructive material in a body lumen of a patient comprising:

providing a source of low-frequency mechanical motion coupled to an elongate vibratory motion catheter having a proximal portion, a distal portion, and a longitudinal axis therebetween;

inserting said vibratory motion catheter into the body lumen of the patient such that said source of mechanical motion remains outside the patient's body; and

activating said source of mechanical motion such that said source of mechanical motion causes low-frequency vibration of said vibratory motion catheter along said longitudinal axis, said vibration including rotational motion about the longitudinal axis and at least one of translational and oscillatory motion and said vibration resulting in a mixing action within said body lumen.

APPENDIX B
CLEAN VERSION OF ALL PENDING CLAIMS

38. (Twice amended) A device for insertion into a body lumen useful for dissolution of obstructive material, the device comprising:

a source of low-frequency mechanical motion; and

an elongate vibratory motion catheter having a proximal portion, a distal portion, and a longitudinal axis therebetween, wherein said proximal portion is matingly engageable with the source of mechanical motion,

wherein said source of mechanical motion is configured to provide low-frequency vibrational motion to the vibratory motion catheter, said low-frequency vibrational motion including rotational motion about the longitudinal axis and at least one of translational motion and oscillatory motion.

39. (Previously amended) A device of Claim 38 wherein said elongate vibratory motion catheter comprises a wire.

40. (Twice amended) A device of Claim 38 wherein said source of mechanical motion is configured to provide said low-frequency vibrational motion to said elongate vibratory motion catheter such that said vibrational motion is greater near the distal end of said elongate vibratory motion catheter than at the proximal end of said elongate vibratory motion catheter.

42. (Twice amended) A method of dissolution of obstructive material in a body lumen of a patient comprising:

providing a source of low-frequency mechanical motion coupled to an elongate vibratory motion catheter having a proximal portion, a distal portion, and a longitudinal axis therebetween;

inserting said vibratory motion catheter into the body lumen of the patient such that said source of mechanical motion remains outside the patient's body; and

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activating said source of mechanical motion such that said source of mechanical motion causes low-frequency vibration of said vibratory motion catheter along said longitudinal axis, said vibration including rotational motion about the longitudinal axis and at least one of translational and oscillatory motion and said vibration resulting in a mixing action within said body lumen.

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44. (Previously added) A method of Claim 42 wherein said elongate vibratory motion catheter comprises a wire.
